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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/216,489
Filing Date: December 18, 1998
Appellant(s): MOHAMMED ET AL.

Fred G. Pruner, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1 September 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. Additionally, an amendment after final rejection filed on 6 July 2004 has been entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: Issue B should be changed to state, "Can claims 39-44 and 46-48 be anticipated and claim 45 be rendered obvious when the cited reference fails to teach all limitations of independent claim 39?"

(7) Grouping of Claims

Appellant's brief includes a statement that Claims 29 – 34, 36 – 38 and 39 – 44, 46 – 48 and 35 and 45 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6 646 677	Noro et al.	11-2003

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 29 – 34, 36 – 44, and 46 – 48** are rejected under 35 U.S.C. 102(e) as being anticipated by Noro et al.

3. For **Claims 29 and 39**, the Examiner believes that the claim language is written broadly enough so as only require the features of either figure 6 or figure 7 taken alone. More

specifically, the Examiner interprets Claim 29 (which is used merely for exemplary purposes wherein the following discussion is equally applicable to independent Claim 39) as follows:

A method comprising:

accumulating commands generated by the execution of an application program, the commands including an action command to cause an imaging device to perform an action and at least one setup command to set up the imaging device to perform the action;

The execution of the application program (corresponding to program 46a) accumulates and generates commands (corresponding to command sequence 65) wherein the commands include an action command and at least one setup command. It is important to note that this limitation requires that an action command and at least one setup command always be accumulated and generated by the execution of the application program (46a).

determining whether one of the commands generated by the execution of the application program (corresponding to 46a) is said action command;

This limitation is superfluous because, as noted above, the application program (46a) always accumulates and generates an action command and at least one setup command. Therefore, it is always determined that one of the commands is the action command.

triggering transmission of all of the accumulated commands to the imaging device in response to the determination that one of the commands is the action command.

Since it is always determined that one of the commands is the action command (as described above), all the accumulated commands (command sequence 65) will be transmitted to the imaging device.

In summary, the program causes the computer to accumulate the action and setup commands so as to form a command packet and transmit the command packet to the imaging device. However, Noro et al. disclose a program that causes a computer to accumulate an action

and setup commands so as to form a command packet and transmit the command packet to an imaging device.

More specifically, Noro et al. disclose a camera management device (12 – figure 5) that utilizes a "simple control" method to operate an imaging device (16). The simple control buttons (A – 61, B – 63, C – 65, D – 67, E – 69, and F – 71; see figure 6) each correspond to a specific predetermined pan, tilt, and zoom position for the imaging device (16). Therefore, a user selects, via the console (46 – figure 6), one of the simple control buttons (e.g. A – 61), which causes the camera to be positioned at a specific predetermined pan, tilt, and zoom position corresponding to the simple control button selected by the user (e.g. position corresponding to button A). The specific predetermined pan, tilt, and zoom positions and button associations are stored in a storage unit (32) within the camera management device (12).

To carryout simple control, the camera management device (12) operates according to the flow chart of figure 11. First, via step S45, the device (12) interrupts image transmission from the camera (16). Next, in steps S46 and 47, the device (12) retrieves the specific predetermined pan, tilt, and zoom position corresponding to the simple control button selected (e.g. 61) from the storage unit (32), calculates a difference between the camera's (16) current pan, tilt, and zoom position and the specific predetermined positions, and generates the appropriate commands to position the camera (16) from the current position to the specific predetermined position. Lastly, in step S48, image transmission from the camera (16) is restarted; thus, concluding the simple control.

In regards to the claim language, the Examiner recognizes that an "action command" causes an imaging device to perform an action; hence, Noro et al. disclose an "action command"

that causes an imaging device (16) to perform an action – the action of taking a picture. The Examiner also recognizes that "at least one set up command" sets up the imaging device to perform to the action; hence, Noro et al. disclose "at least one set up command" that sets up the imaging device to perform to the action – positioning the imaging device at the specific predetermined pan, tilt, and zoom positions so as to take the picture.

As made clear above, the determining step is superfluous and is performed simultaneously with the accumulating step. The determining step, which requires "determining whether one of the commands generated by the execution of the application program is said action command," takes place simultaneously with the accumulation step, which requires "accumulating commands generated by the execution of an application program, the commands including an action command to cause an imaging device to perform an action and at least one setup command to set up the imaging device to perform the action," because the accumulation step is guaranteed to produce the affirmative result (an action command) of the determination.

Finally, at the time a user selects simple control button (A – F), action commands and set up commands are immediately generated and accumulated by the camera management device (12). In other words, the camera management device (12) generates and accumulates the commands that tell the camera (16) what position to be in and to actually take a picture at that position; however, the camera (16) does not move to that position and does not actually take a picture until those accumulated commands are transmitted to the camera (16). At the same time, the camera management device (12) has determined that an action command has been generated and accumulated because the camera management device (12) always generates and accumulates the action command (take a picture command). Furthermore, based upon that accumulation and

determination, Noro et al. triggers the transmission of all the accumulated commands to the camera. In other words, Noro et al. actually tells the camera to reposition itself and to take a picture at the new position.

4. As for **Claims 30 and 40**, Noro et al. disclose that the determination is always affirmative. In other words, an action command is always generated and accumulated and the accumulated commands are transmitted to the imaging device (16). Noro et al. disclose the simple control method when a user selected a single simple control button (A – F); therefore, the only commands transmitted to the imaging device are the commands that have been generated and accumulated in response to the user selection. In other words, Noro et al. disclose responding to the determination by transmitting the accumulated commands to the imaging device during a time in which no other commands are transmitted to the imaging device.

5. As for **Claims 31 and 41**, Noro et al. disclose that the user operates the console (46) via the imaging operation device (20). Furthermore, the imaging management device (12) and the imaging operation device (20) are connected by means of a LAN (10) and/or any other suitable network means (see column 13, lines 1 – 9). Also, as stated in column 7 (lines 36 and 37), Noro et al. disclose that the imaging device (16) transmits video images to a monitor (50) within the imaging operation device (20) and that the imaging operation device (20) transmits commands to the imaging management device (12), via the LAN (10). Finally, as stated in column 8 (lines 26 – 36), the video images may be transmitted at a bit rate of 290 kbits/s.

Since, Noro et al. disclose a bit rate as the rate in which the video images may be transmitted to the imaging operation device (20) from the imaging device (16), Noro et al.

inherently disclose that the video images and commands are delivered to the imaging operation device (20) and the imaging management device (12) over a serial bus.

6. As for **Claims 32 and 42**, the Examiner recognizes that an "action command" causes an imaging device to perform an action; hence, Noro et al. disclose an "action command" that causes an imaging device (16) to perform an action – the action of taking a picture or rather a frame of a video image.

7. As for **Claims 33 and 43**, Noro et al. disclose wherein the action command (see explanation above) comprises a command to instruct the imaging device to capture a frame of a still image. As stated above, the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to capture a frame of a video image. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured or rather a frame of a still image is captured.

8. As for **Claims 34 and 44**, Noro et al. disclose that the user operates the console (46) via the imaging operation device (20). Furthermore, the imaging management device (12) and the imaging operation device (20) are connected by means of a LAN (10) and/or any other suitable network means (see column 13, lines 1 – 9). Also, as stated in column 7 (lines 36 and 37), Noro et al. disclose that the imaging device (16) transmits video images to a monitor (50) within the imaging operation device (20), via the LAN (10). Furthermore, as stated in column 8 (lines 26 – 36), the video images may be transmitted at a bit rate of 290 kbits/s. Since, Noro et al. disclose a bit rate as the rate in which the video images may be transmitted to the imaging operation device (20) from the imaging device (16), Noro et al. inherently disclose that the video images are

delivered to the imaging operation device (20) over a serial bus. Lastly, Noro et al. disclose that the imaging operation device (20) may be a personal computer, as stated in column 9 (lines 28 – 36). Therefore, Noro et al. disclose wherein the action command comprises a command to instruct the imaging device to deliver a frame of a previously captured still image to a computer over a serial bus.

9. As for **Claims 36 and 46**, Noro et al. disclose, as stated in column 9 (lines 28 – 36), a driver program is loaded from an external storage device onto a main memory and after loading the driver program, the flowchart, representing the control method, is implemented in the imaging operation device (20) by means of an application program, as stated in column 7 (lines 39 – 48), that is comprised of a graphical user interface (GUI) and interactive with a pointing device (mouse). As stated above, the accumulating, triggering, and determining of commands take place in the application program. Therefore, Noro et al. disclose wherein the accumulating, triggering, and determining occur in response to execution of a driver program for the imaging device (16), the drive program being separate from the application program.

10. As for **Claims 37 and 47**, Noro et al. disclose, as stated above, that the action command is generated by the application program in response to a user's input into the console (46). The action command instructs the imaging device (16) to take a picture. Video images are comprised of a series of still image frames and, therefore, a frame of a video image is captured. Therefore, Noro et al. disclose, wherein the application program comprises one of a still image capture program and video image capture program.

11. As for **Claims 38 and 48**, Noro et al. disclose, that the determination is always affirmative. In other words, an action command is always generated and accumulated and the

accumulated commands are transmitted to the imaging device (16). Therefore, this limitation becomes superfluous because the accumulated commands are always transmitted to the imaging device.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. **Claims 35 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Noro et al.

14. As for **Claims 35 and 45**, Noro et al. disclose, as stated above, that the simple control data is stored in the storage unit (32) and is comprised of information corresponding to image sensing directions and zooming ratios, however, Noro et al. is silent with respect to the storage of information corresponding to an exposure time in the storage unit (32).

However, **Official Notice** (MPEP § 2144.03) is taken the both the concepts and advantages of instructing an imaging device to set an exposure time are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to instruct an imaging device to set an exposure time as means to provide a crisp, sharp image.

(11) Response to Argument

The heart of the Applicant's invention lies within figures 6 – 8. Figures 6 – 8 illustrate the generation and transmission of command sequences. As shown in figure 6, a command sequence (65) features a set of commands that have been generated and accumulated by a computer program (46a) and, as shown in figure 7 during an overlapping time period, another command sequence (66) features an additional set of commands generated and accumulated by an additional computer program (46b). Lastly, figure 8 shows that even though the respective command sequences (65 and 66) were generated and accumulated, by two different computer programs (46a and 46b) during overlapping time periods (i.e. in parallel), each command sequence (65 and 66) is transmitted during non-overlapping time periods (i.e. in serial). While the Applicant's intention may have been to incorporate the above-described features of figure 6 – 8 into independent Claims 29 and 39; the Examiner believes that each of the independent claims are written broadly enough so as only require the features of either figure 6 or figure 7 taken alone.

Turning to Claim 29 (which is used merely for exemplary purposes wherein the following discussion is equally applicable to independent Claim 39) the claim languages is interpreted by the Examiner, in light of figure 6 (7) as follows: *A method comprising:*

- *accumulating commands generated by the execution of an application program, the commands including an action command to cause an imaging device to perform an action and at least one setup command to set up the imaging device to perform the action;*

The execution of the application program (corresponding to program 46a) accumulates and generates commands (corresponding to command sequence 65) wherein the commands include an action command and at least one setup

command. It is important to note that this limitation requires that an action command and at least one setup command always be accumulated and generated by the execution of the application program (46a).

o *determining whether one of the commands generated by the execution of the application program (corresponding to 46a) is said action command;*

This limitation is superfluous because, as noted above, the application program (46a) always accumulates and generates an action command and at least one setup command. Therefore, it is always determined that one of the commands is the action command.

o *triggering transmission of all of the accumulated commands to the imaging device in response to the determination that one of the commands is the action command.*

Since it is always determined that one of the commands is the action command (as described above), all the accumulated commands (command sequence 65) will be transmitted to the imaging device.

Based upon the Examiner's interpretation above, Claim 29 is written broadly enough so as to only require the features of either figure 6 or figure 7 taken alone – the program causes the computer to accumulate the action and setup commands so as to form a command packet and transmit the command packet to the imaging device. Notwithstanding the Examiner's interpretation of independent Claim 29 (39), the Applicant's basis for argument, in issues A – D, is that Noro et al. fails to teach or suggest generating commands by an application program including at least one setup command and at least one action command and, without the generation of the action command, there can be no triggering of transmission of the accumulated commands.

The Examiner disagrees with Applicant's interpretation of Noro et al. Noro et al. can be briefly summarized utilizing figures 5, 6, 9 and 11. Turning to figure 5, a camera operation device, which can be implemented in the form of a personal computer (PC) and in hardware or software, communicates via a network (LAN 10), with a camera management device (12) so as to instruct the camera management device (12) on how to operate a camera (16), which is connected directly to the camera management device (12). The camera management device (12) may also be implemented using hardware or software. The camera operation device (20) is comprised of a console (46), which provides a user interface to the system; the console (46) is shown in figure 6. Turning to figure 6, the console is provided with a viewfinder window (76) for displaying images transmitted from the camera (16) and series of operational buttons (61 – 74). Noro et al. classifies the operational buttons (61 – 74) into two classifications, wherein buttons (62, 64, 66, 68, 70, 72, and 74) are classified as normal control buttons and buttons (61, 63, 65, 67, 69, and 71) are classified as simple control buttons. For the purposes of this discussion, it is not necessary to describe normal control, albeit, Noro et al. distinguishes between normal control and simple control as will become evident below.

Each of the simple control buttons (A – 61, B – 63, C – 65, D – 67, E – 69, and F – 71) corresponds to a specific predetermined pan, tilt, and zoom position for the camera (16). Therefore, a user selects, via the console (46), one of the simple control buttons (e.g. A – 61), which causes the camera to be positioned at a specific predetermined pan, tilt, and zoom position corresponding to the simple control button selected by the user (e.g. position corresponding to button A). The specific predetermined pan, tilt, and zoom positions and button associations are stored in a storage unit (32) within the camera management device (12). Figures 9 and 11 are

flowcharts that respectively describe the operation of the camera operation device (20) and management device (12), respectively, as will become evident below.

As shown in figure 9, the camera operation device (20), in step S15, acquires information that identifies which of the buttons on the console (46) a user has selected. In step S16, the camera operation device (20) determines whether the button selected by the user is a button that corresponds to normal control (62, 64, 66, 68, 70, 72, and 74) or a button that corresponds to simple control (A – F). When the camera operation device (20) determines that a user has selected a button corresponding to simple control, the camera operation device (20) informs the camera management device (12) that simple control is to be performed by transmitting a command representing the same, as will become evident below.

As shown in figure 11, the camera management device (12) reaffirms, by means of steps S41 and S43, that simple control is the control to be performed. To carryout simple control, the camera management device (12) first, via step S45, interrupts image transmission from the camera (16). Next, in steps S46 and 47, the camera management device (12) retrieves the specific predetermined pan, tilt, and zoom position corresponding to the simple control button selected (e.g. 61) from the storage unit (32), calculates a difference between the camera's (16) current pan, tilt, and zoom position and the specific predetermined positions, and generates the appropriate commands to position the camera (16) from the current position to the specific predetermined position. Lastly, in step S48, image transmission from the camera (16) is restarted; thereby, concluding the operation of Noro et al.

The Applicant presents two arguments, which are: 1. There is no teaching or suggestion in Noro regarding generating commands by an application program including at least one set up command and at least one action command and 2. There is no teaching or suggestion in Noro regarding triggering transmission of all the accumulated commands to an imaging device in response to the determination of that one of the commands in an action command.

The Examiner completely disagrees with the Applicant's arguments and believes the operation of Noro et al. and, more specifically, the simple control method of Noro et al. successfully anticipates the claim language of independent Claim 29 (39) as interpreted by the Examiner above. Initially, it is recognized by the Examiner that an "action command" causes an imaging device to perform an action; hence, Noro et al. disclose an "action command" that causes an imaging device (16) to perform an action – the action of taking a picture. Secondly, it is also recognized by the Examiner that "at least one set up command" sets up the imaging device to perform to the action; hence, Noro et al. disclose "at least one set up command" that sets up the imaging device to perform to the action – positioning the imaging device at the specific predetermined pan, tilt, and zoom positions so as to take the picture.

The Examiner is aware the steps claimed including "accumulating", "determining," and "transmitting" were intended to be performed sequentially in that order; however, as made clear above, the determining step is superfluous and is performed simultaneously with the accumulating step. The determining step, which requires "determining whether one of the commands generated by the execution of the application program is said action command," takes place simultaneously with the accumulation step, which requires "accumulating commands generated by the execution of an application program, the commands including an action

command to cause an imaging device to perform an action and at least one setup command to set up the imaging device to perform the action," because the accumulation step is guaranteed to produce the affirmative result (an action command) of the determination.

In regards to Noro et al., at the time a user selects simple control button (A – F), action commands and set up commands are immediately generated and accumulated by the camera management device (12). In other words, the camera management device (12) generates and accumulates the commands that tell the camera (16) what position to be in and to actually take a picture at that position; however, the camera (16) does not move to that position and does not actually take a picture until those accumulated commands are transmitted to the camera (16). At the same time, the camera management device (12) has determined that an action command has been generated and accumulated because the camera management device (12) always generates and accumulates the action command (take a picture command). Furthermore, based upon that accumulation and determination, Noro et al. triggers the transmission of all the accumulated commands to the camera. In other words, Noro et al. actually tells the camera to reposition itself and to take a picture at the new position.

In conclusion, the claim language of independent Claim 29 (39) is written broadly enough so to allow for the Examiner's interpretation above. Furthermore, the Examiner has successfully traversed the Applicant's arguments by showing how Noro et al. successfully anticipates each of the claimed limitations including: accumulating commands that set up the camera to take a picture and to take a picture once set up; determining that one of the commands is a command for taking a picture; and transmitting the commands to cause the camera to be set up and to actually take a picture once set up.

For these reasons, the Examiner believes the rejection of Claims 29 and 39 under 35 U.S.C. §102(e) as being anticipated by Noro et al. should be sustained.

Respectfully submitted,

JPM
December 22, 2004

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